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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,143	03/13/2001	Hajime Enomoto	826.1696/JDH	8633

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EXAMINER
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HOANG, PHUONG N

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/804,143

Applicant(s)

ENOMOTO, HAJIME

Examiner

Phuong N. Hoang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

Claims 1 – 11 are presented for examination.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 3 – 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Immerman, US patent no. 6,574,617 in view of Cheng, US patent no. 6,067,548.**

3. Immerman and Cheng references were cited in the last office action.

4. **As to claim 11**, Immerman teaches a computer readable medium storing an object network of hierarchically arranged models (a hierarchy of models, abstract and fig 2 and col. 5 lines 11 – 50), comprising the steps of:

a data model (data model, object data store model 92) represent an attribute structure as a set of templates;

object model as a higher model than the data model (security model or index model);

Immerman teaches the replication model (replication model, col. 6 lines 15 – 27) describing the content of a process, and mail model (mail model, col. 6 lines 40 – 50) defining the rules for cooperatively information from different models.

Immerman does not explicitly cite the replication model and mail model are role model and process model.

Cheng teaches the steps of:

a role model (role model, col. 1 lines 52 – 65 and col. 6) representing the content of a process to be executed in the environment as a set of a plurality of object models; and

a process model (process model, col. 1 lines 52 – 65 and col. 4 lines 49 – 60) defining a dynamic process cooperatively executed by a plurality of role models as one process.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Immerman and Cheng's system because Cheng's models would provide the roles and full implementation of important models to process a plurality of models in the hierarchical structure of Immerman's system.

5. **As to claim 1**, this is apparatus claim of claim 11. See rejection for claim 11 above. Further, Immerman teaches the step of an object contained within the object network (local run time model 90 comprises a hierarchy of models, abstract and fig 2 and col. 5 lines 11 – 50) having a hierarchical structure.

6. **As to claim 3**, Immerman teaches the steps comprising of a process function kernel portion for executing a controlling process (client operating system run the application .....exe col. 34 lines 8 – 22) performed with an intervention of a user of the information processing apparatus using the name of a concerned party for the process of the object network and the name of a work performed by the concerned party.

7. **As to claim 4**, Cheng teaches the steps of wherein the data model, object model, and the role model are statically defined (statically defined roles, col. 2 lines 38 – 42), and wherein the specifications of the process model are dynamically (dynamic, col. 5 lines 45 – 65) defined so that the validity of the process performed in the set of the plurality of object modes is assured corresponding to a consistency constraint entity defined as an attribute of an object.

8. **As to claim 5**, Cheng teaches the steps of wherein an inconsistent constraint entity corresponding to the process model describes a validity predicate about the validity of the process and a control state for executing the process (state, col. 3 lines 30 – 35 and col. 5 lines 5 – 15).

9. **As to claim 6**, Cheng teaches the steps of wherein the hierarchical structure further the hierarchical structure of a reference model (reference model, col. 3 lines 40 – 45 and col. 6 lines 40 - 45) for accomplishing a basic service to be executed in the process of the object network, the reference model being orthogonal to the hierarchical structure of the data model, the object model, the role model, and the process model.

10. **As to claims 7 and 8**, Immerman and Cheng do not explicitly teach the concerned party of the process and the process function kernel portion of the information processing apparatus use a reference driving function so as to accomplish a service of the reference model.

It would have been obvious to one of ordinary skill in the art to recognize that the concerned party of the process and the process function kernel portion of the information processing apparatus use a reference driving function so as to accomplish a service of the reference model because the kernel needs to know which model or function it refers to.

11. **Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Immerman, US patent no. 6,574,617 in view of Cheng, US patent no. 6,067,548, and further in view of Pandit, US patent no. 5,937,402.**

12. Pandit reference was cited in the last office action.

13. **As to claim 2**, Cheng and Immerman does not explicitly teach the steps of wherein the object model has:

a format model representing a pattern of a noun object and a verb object;

a feature model representing a feature of the object corresponding to an attribute value of the object and having a constraint condition corresponding to the environment;

an object network model having a graph structure of which the name of the noun object is represented as a node and the name of the verb is represented as a branch.

Pandit teaches the steps of

a feature model representing a feature of the object corresponding to an attribute value of the object and having a constraint condition corresponding to the environment (the object model .... Constraint servers to establish the relationship for both the objects, col. 9 lines 35 – 55);

an object network model having a graph structure of which the name of the noun object is represented as a node and the name of the verb is represented as a branch (col. 9 lines 45 – 52 and col. 10 lines 40 - 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Cheng, Immerman, and Pandit's system because Pandit's constraint condition would provide a valid selection of data and reliable data.

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14. **As to claim 10**, Pandit teaches the steps of structure designing means for designing a system structure in such a manner that noun objects and verb objects (col. 9 lines 35 – 55) that compose the object network correlate with data paths as keywords of the system structure.

15. **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Immerman, US patent no. 6,574,617 in view of Cheng, US patent no. 6,067,548, and further in view of the admitted prior art (APA) pages 1 – 3.**

16. **As to claim 9**, Immerman and Cheng do not teach the steps of  
a WELL system as software using the object network and the common platform;  
and software exporting means for exposing the WELL system to another software

The APA teaches a WELL system (well, page 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Cheng, Immerman, and the APA's system because the APA's WELL system is also a window based system and would provide an user-friendly system for Cheng's enterprise application.

***Response to Arguments***

17. Applicant's arguments, filed on 9/7/04, have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (703)

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605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ph  
January 14, 2005

  
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